

## **ABSTRACT**

Methods of generating a varying potential across a membrane of closed membrane structure, methods of detecting the functioning of a protein of a closed membrane structure, and methods of detecting the effects of an agent on the functioning of a protein of a closed membrane structure, by moving the structure, suspended in a fluid, through an electric field by non-ionic transport means to induce a varying potential across the membrane, are disclosed. Apparatus for generating a varying potential across a membrane of a closed membrane structure, apparatus for detecting the functioning of a protein of a closed membrane structure and apparatus for detecting the effect of an agent on the functioning of a protein of a closed membrane structure, by moving the structure, suspended in a fluid, in an electric field to induce a varying potential across the membrane, are also disclosed.